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Warren B Kice
Haynes & Boone
Suite 3100
901 Main Street
Dallas, TX 75202

EXAMINER

REIFSNYDER, DAVID A

ART UNIT

PAPER NUMBER

1723

DATE MAILED: 05/07/2003

10

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/889,762

Applicant(s)

TAJIMA, HIDEJI

Examiner

David A Reifsnnyder

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 February 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6,8-11 and 13-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6,8-11 and 13-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 July 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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Election/Restrictions

Applicant's election of Group I, claims 1-6, 8-11 and 13-16 in Paper No. 9 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Furthermore, the applicant canceled non-elected claims 17-22.

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The following title is suggested"---Concentration Device Using Magnetic Particles---

The disclosure is objected to because of the following informalities: page 17, line 1; "check valve **14a**" should be ---check valve **14b**--- page 17, line 2; "check valve **14b**" should be ---check valve **14c**--- .

Appropriate correction is required.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the instantly claimed

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"shift means" which is described in the specification as a "shift section" must be shown or the feature canceled from claim 14. No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Objections

Claims 6 and 9 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim shall not depend from another multiple dependent claim. See MPEP § 608.01(n). Accordingly, claim numbers 6 and 9 **have not** been further treated on the merits.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-5, 8, 10, 11 and 13-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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Regarding claim 1; the recitation of "storage section communicated with each liquid passage" is vague and indefinite as to what is meant by "communicated". To correct this problem change "communicated" to ---communicating---. Furthermore, the recitation of "which can exert a magnetic field from outside of the liquid passage" is vague and indefinite as to which liquid passage is "the liquid passage" (i.e. is "the liquid passage" ---the liquid suction passage--- or ---the liquid discharge passage---?) In addition, the recitation of "the inner wall of the liquid passage" is vague and indefinite as to which liquid passage is "the liquid passage" (i.e. is "the liquid passage" ---the liquid suction passage--- or ---the liquid discharge passage---?)

Regarding claim 8; the recitation "said pressure adjustment means can be mounted by one pipette tip" is vague and indefinite as exactly whether a pipette tip is being claimed or not, and if a pipette tip is claimed, it is vague and indefinite as to whether the pipette tip must be mounted on the pressure adjustment means or not.

Regarding claim 10; the recitation of "a pump provided in the liquid passage" does not make sense as to how a pump can be provided in a liquid passage. Furthermore, the recitation of "the liquid passage is provided so as to be able to be taken out" is vague and indefinite as to what the liquid passage is taken out from. Lastly, the recitation of "while attracting the separated magnetic particles" is confusing because it implies that magnetic particles are part of the concentration device while the rest of the claim is written as if the magnetic particles are intended to be used in the device but are not part of the device.

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Regarding claim 13; the recitation of "the pH of the solution containing the magnetic particles" lacks antecedent basis. Furthermore, since the magnetic particles and the target substance is not part of the claimed concentration device it is vague and indefinite as to what the applicant intends to claim in claim 13. Furthermore, while claim 9 **is not** being considered on the merits, when claim 9 is considered on the merits it will have the same 35 USC 112 2nd paragraph rejection as claim 13 does.

Regarding claim 14; the recitation of "control means for controlling the operation of the liquid drive means" is vague and indefinite because a liquid drive means was not claimed in either claim 1 or claim 10.

Regarding claim 15/14/1; the recitations of "the suction port of the liquid passage", "the discharge port of the liquid passage" and "the suction port and the discharge port" all lack antecedent basis. Furthermore, claim 15/14/1 simply does not make any sense.

Regarding both claims 15/14/1 and 15/14/10 the recitation of "a bottom portion of each liquid receiving section" is vague and indefinite as to what is meant by "each liquid receiving section" since a liquid receiving section was not claimed.

Regarding claim 16/14/1; the three recitations of "the liquid passage" are vague and indefinite as to which passage is "the liquid passage". Furthermore, the recitation of "the suction port" and "discharge port" both lack antecedent basis .

Regarding both claims 16/14/1 and 16/14/10; the recitation of "the target substance such as bacteria" lacks antecedent basis because a "target substance" not a "target substance such as bacteria" was previously claimed. In addition, the recitation of

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"such as bacteria" is vague and indefinite as to whether the target material has to be bacteria. Furthermore, the recitation of "a container where a second volume of liquid is stored" is vague and indefinite as to whether that container is the same or a different container from the one that stored the first volume or liquid. If the container is different the way to correct this problem is for the applicant to claim a ---second container---.

Note: While the above 35 USC 112 2nd paragraph rejections were written to be complete, due to the numerous problems with the claims the applicant should check to make sure the Examiner has not missed any 35 USC 112 2nd paragraph problems.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Note: When reading the following rejection over JP 10-332687 the applicant should be aware that the rejections are based on the fact that the magnetic particles and the liquid including a target substance are not part of the instantly claimed concentration device. If the applicant intends to claim the magnetic particles and/or the liquid including a target substance then he should positively claim them.

Claims 1-5, 9-11 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 10-332687.

Regarding claims 1-5 and 8; JP 10-332687 discloses a concentration device comprising: a liquid suction passage in which liquid can pass through only in a suction direction; a liquid discharge passage in which liquid can pass through only in a discharge direction; a magnetic force means **[see 0030]**; a storage section communicating with each liquid passage, for storing the sucked liquid; and a pressure adjustment means for sucking and discharging the liquid by adjusting the pressure in the storage section; wherein said storage section is provided detachably with respect to said pressure adjustment means. **(see figures 5 and 6)**

Regarding claims 10, 11 and 13; JP 10-332687 discloses a concentration device comprising: tanks a liquid passage having a suction port and a discharge port, in which liquid can pass therethrough; magnetic force means **[see 0030]**; and a pump for transferring the liquid along a transfer direction of liquid in the liquid passage. **(see figures 5 and 6)**

Claims 10, 11 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 96/29602

Regarding claims 10, 11 and 13; WO 96/29602 discloses a concentration device comprising: tanks a liquid passage having a suction port and a discharge port, in which liquid can pass therethrough; magnetic force means; and a pump for transferring the

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liquid along a transfer direction of liquid in the liquid passage. (see figures 7, 9 to 13, 22 and 23)

Allowable Subject Matter

Claims 14/1, 15/1, 16/1, 14/10, 15/10 and 16/10 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

The main reason for the allowance of claims 14/1, 15/1, 16/1, 14/10, 15/10 and 16/10 over art is that the prior art of record fails to describe the apparatus as having all the limitations claimed in whole and including the instantly claimed **shift means and control means.**

Conclusion

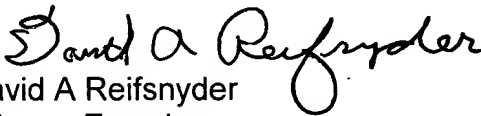
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. JP 60-189834 who discloses a quantitative pipette device comprising a liquid suction passage in which liquid can pass through only in a suction direction; a liquid discharge passage in which liquid can pass through only in a discharge direction.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to David A Reifsnyder whose telephone number is 1-703-308-0456. The examiner can normally be reached on M-F 9:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda M Walker can be reached on 1-703-308-0457. The fax phone numbers for the organization where this application or proceeding is assigned are 1-703-872-9310 for regular communications and 1-703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 1-703-308-3601.


David A Reifsnyder
Primary Examiner
Art Unit 1723

DAR
May 5, 2003